STATE OF NEW YORK
SUPREME COUNTY OF ALBANY

In the Matter of the Application of

PROTECT THE ADIRONDACKS! INC.,

Plaintiff-Petitioner,

for a Judgment Pursuant to
Section 5 of Article 14 of
the New York State Constitution,
and CPLR Article 78,

AFFIDAVIT OF PETER BAUER

-against-

NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION and
ADIRONDACK PARK AGENCY,

Defendants-Respondents.

STATE OF NEW YORK)
)SS.:
COUNTY OF WARREN)

Peter Bauer, being duly sworn, deposes and says that:

1. I am the Executive Director of Plaintiff-Petitioner Protect the Adirondacks! Inc. (hereinafter the "Plaintiff" or "PROTECT"). I make this affidavit in support of Plaintiff's motion for summary judgment.

2. There is no scientific justification provided by the Department of Environmental Conservation ("DEC") for the decision to exclude trees less than 3" diameter at breast height ("DBH") from its formal policy for tree cutting on the Forest Preserve. In January 2016, I submitted a Freedom of Information Request to the DEC for all materials on "Lands and Forests Policy # 91-2 on Cutting, Removal or Destruction of Trees and Other Vegetation on Forest Preserve Lands, including public hearing notices, Environmental Impacts Statements, scientific

documentation or analysis or studies, public comments, ENB notices, public hearing notices, memos, or any other relevant documents." The materials sent to me included internal drafts, a revision, correspondence with the NYS Attorney General, and a response from the Attorney General. The DEC did not provide any "scientific documentation or analysis or studies scientific" to support its decision to use 3" DBH as the minimum standard for when to count a tree as a tree. This decision appears arbitrary and is not supported by either science or professional forest management, which includes evaluation and calculation of small diameter trees as a basic element of sound forest management.

3. Trees that are less than 3" DBH are generally considered low value trees from an economic standpoint, but possess a commercial value nevertheless. This was the case in the 19th century and is the case today. While small diameter trees represent the future growing stock on a commercial woodlot, which is of great future importance to any private forestland owner, the immediate value of a small diameter tree in financial terms is low. Despite the low economic value of small diameter trees, standard forest management practices that calculate the total "basal area" on an acre of forestland includes analysis of small diameter trees. "Basal area" is the common term used to describe the average amount of an area (usually an acre) occupied by tree stems, both small and large. It is defined as the total cross-sectional area of all stems, both small and large, in a stand measured at breast height, and expressed as per unit of land area (typically square feet per acre). The Reference Handbook for Foresters, issued by the USDA Forest Service State and Private Forestry Northeastern Area provides a table titled "Basal Area" (p. 23) that provides foresters with a conversion chart for trees of diameters from 1" to 40" DBH with the corresponding area of coverage in square feet (Exhibit A). A tree of 1" DBH has a coverage of .006 square feet per acre for each stem, whereas as tree of 40"DBH has a coverage of 8.73

square feet per acre for each stem. Small diameter trees would not be included in such an important forestry management calculation as basal area if they were not an essential part of such calculations. Calculation of the basal area is also used for other purposes beyond forest management. For instance, basal area calculation is also an essential step in the DEC's "New York State Stormwater Management Design Manual."[1]

4. Today, small diameter trees are an important part of the growing biomass commercial market for forest products in New York. One common commercial use today of small diameter trees is biomass production, where a variety of tree parts and small diameter trees are processed into chips. The Forest Guild, a leading organization of foresters, definition of biomass in its report "Revised Assessment of Biomass Harvesting and Retention Guidelines" (April 2010)[2] states: "In this report, the term biomass refers to vegetation removed from the forest, usually logging slash, small-diameter trees, tops, limbs, or trees not considered merchantable in traditional markets. Similarly, we use the phrase biomass harvesting to refer to the removal of logging slash, small-diameter trees, tops, or limbs." (p. 1) All woody vegetation is suitable for the new and growing biomass market. A copy of the pertinent page from this report is annexed hereto as Exhibit B.

5. The biomass market, which includes use of small diameter trees, is a substantial part of the overall forest products market in New York State. The "New York State Industrial Timber Harvest Production and Consumption Report-2014", the most recent available, published by the DEC[3], states: "Total timber harvest production level was 169 million cubic feet, composed of the following product breakdown: Log production – 600 million board feet (MMbf) Pulpwood &

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[1] DEC's New York State Stormwater Management Design Manual is available online at http://www.dec.ny.gov/chemical/29072.html.
[2] This report is available at http://www.forestguild.org/publications/research/2009/biomass_guidelines.pdf.
[3] This report is available at http://www.dec.ny.gov/lands/33295.html.

Chips production – 2.5 million green tons (37% pulpwood/63% chips). This is the seventh consecutive year that the harvest volume of pulpwood and chip products was greater than the harvest of logs." (p 1) This statement shows the importance of chip production, which has provided a market for low-grade trees, especially for small diameter trees, that a landowner seeks to clear out or reduce for any number of long-term forest management objectives. Clearly, this report shows that small diameter trees are part of "timber harvest production" in New York in 2014 and currently. A copy of the pertinent page from this report is annexed hereto as Exhibit C.

6. Historically, small diameter trees were also widely used in the charcoal manufacturing industry in the northern Adirondacks in the 19th and early 20th centuries. Vast areas of the northern Adirondacks, unlike other areas in the south and central Adirondacks, were clearcut of all trees to supply charcoal factories. Charcoal manufacture burned immense quantities of all sizes of hardwood trees. In "The Great Forests of the Adirondacks" historian Barbara McMartin wrote "Charcoal can be produced from almost any species of hardwood trees. Even small trunks and limbs could be used, so that the northern forests, which were at least sixty percent hardwoods, were severely cut. And, of course, in the process of cutting hardwoods, the best of the softwood logs were also taken to nearby mills to be sawn for local construction. As a result, in charcoal-producing region, the forest was actually clearcut." (p. 32) Copies of the pertinent pages from this book are annexed hereto as Exhibit D.

7. Charcoal was necessary for the production or iron, an important 19th century Adirondack industry. McMartin stated that every ton of iron required 350-500 bushels of charcoal and that it took 2.25 cords of wood to produce 100 bushels of charcoal. (p. 33) The result was that dozens of charcoal mills clearcut large swathes of Adirondack forests, removing all trees. McMartin stated "To fuel the century's manufacturing of charcoal iron, it is estimated that between

200,000-250,000 acres of Adirondack-Champlain forest land were cleared." (p. 36) Clearly, small diameter trees were part of the 19th century sense of "timber", which included all trees large and small. McMartin recounted the observation of a visitor to the region at the time who reports a barren clearcut landscape with no trees and charcoal mills surrounded by cords of "timber": "A traveler in 1891 described the scene in an article in 'Forest and Stream.' As part of a trip to circumnavigate the Adirondacks, the writer journeyed on the Chateaugay Railroad, anticipating the 'grand old Adirondacks' as viewed from the narrow gauge road. Instead, the trip gave him '...blues from the start. For miles and miles we went through and by acres of stump-covered rocks, covered with an inch or so of soil; millions of boulders, piles of iron ore, and worst of all, flock after flock of beehive-like structures, surrounded by thousands of cords of timber to be transformed to charcoal. It was a dismal ride; and the clearings of years ago as we neared Paul Smith's were like jewels in an ugly setting. If Dante had met me that day and asked my opinion as to a good model for his road to the inferno, I think I should have recommended a trip over the Chateaugay." Since all trees were being clearcut, both large and small, the "timber" described here surely included both large and small trees.

8. Three pictures obtained from the collections of historic photographs at the Adirondack Museum are attached hereto as Exhibit E. These three pictures show the iron ore mill at Standish and two charcoal mill operations along the Chateaugay Railroad, mentioned above, that clearly show that all trees, both large and small, were clearcut and removed.

9. Small diameter trees are also an important part of "rustic furniture" or "Adirondack furniture" manufacturing in the Adirondack Park and other places. Starting in the mid-19th century, and continuing through today, small diameter trees have been a staple material for rustic furniture in the Adirondacks. Many books and articles have been published on rustic furniture

and the twig decorative arts. This is a subject of an annual fair at the Adirondack Museum in Blue Mountain Lake where rustic furniture is also widely displayed as part of the Museum's permanent collection. Rustic furniture utilized twigs, branches, stumps, as well as both large and small diameter trees. Rustic furniture is a historic and enduring art form, as well as serious furniture manufacturing industry, which is important to Adirondack traditions and cultural heritage. Small diameter trees of less than 3"DBH are a staple part of rustic furniture.

10. In the leading history of Adirondack furniture "Adirondack Furniture and the Rustic Tradition" historian Craig Gilborn stated "Stick furniture consisted of saplings or branches, commonly one to two inches in diameter...." (p. 83) In another section he wrote about the uses of small diameter yellow birch that demonstrated "iridescence and silky texture, characteristic of wood from saplings or immature trees." (p. 84) Gilborn wrote that small diameter northern white cedar was also prized because of its versatility. (p. 116) Gilborn's history of rustic furniture also lists more than three dozen rustic furniture manufacturers in the Adirondacks. (p. 299) Copies of the pertinent pages from this book are annexed hereto as Exhibit F.

11. The literature of the late 19th century, the time when Article XIV was enacted, include many references to "timber" in travelogues and writings about the Adirondacks. One of the most popular historic travelogues ever written in the Adirondack Park was a series of articles in the widely read "Forest and Stream" magazine about a canoe trip in 1884 across the Adirondack Park by "Nessmuck", the pen name for the writer George Washington Sears. These articles were so popular that a Mount Nessmuck was named after him upon his death in Tioga, Pennsylvania, near his birth place. These articles have been collected by the Adirondack Museum in "Canoeing the Adirondacks with Nessmuck: The Letters of George Washington Sears." (Dan Brenan, Adirondack Museum and Syracuse University Press, 1993) In several

instances, Sears used the word "timber" interchangeably with forest or for a large assemblage of trees. He wrote "The beaver is the first wild animal of importance to disappear before the white man; but there are men now living who remember when these beaver meadows were beaver ponds, with busy, sagacious, shy inhabitants. At present they are perfectly level meadows, invariably dotted with graceful light green tamaracks, with an occasional spruce, standing singly or in groups of three or four, resting in calm quiet in the bright sunlight, scarcely moved by the furious gales that sweep the mountain tops bare of timber." (p. 46) Sears was not making reference to board feet or the financial value of these trees, rather he was referring to a large group of trees.

12. Another keen observer of Adirondack forests was Bob Marshall, the avid hiker and conservationist. Marshall's reaction to hiking through a large intact Adirondack forest in the first decade of the 20th century is recounted: "Against the backdrop of a human manipulated landscape, when Marshall found a tract of unbroken wildness, it astonished him. On a late summer hike, Marshall and a classmate stumbled upon an expanse of first-growth pine and spruce of nearly fifty thousand acres. It was very pleasant he remembered, 'as we laid down to reflect we were in the heart of a tract of virgin timber about 40 mile square and unmaimed by man.' " (p. 98-99) (Science and the Social Good: Nature, Culture and Community, 1865-1965, John Herron, 2010, Oxford University Press) Clearly, Marshall was not talking about only big trees that were merchantable; he was talking about a 40-mile square forest.

13. It's important to understand that the construction of Class II Community Connector snowmobile trails is, in essence, forest clearcuts. These clearcuts are 9-12 feet wide and run through a section of the Forest Preserve for a few miles or as in the case of the Seventh Lake Mountain Trail, the longest such trail planned to date, up to 11.69 miles. All trees are removed

from these trail corridors. No trees will be allowed to regrow in these trail corridors. One mile of trail at 9 feet in width equals 1.09 acres. One mile of trail at 12 feet in width equals 1.45 acres. It is estimated that the DEC has currently constructed, or plans to construct at least 36.53 miles of class II community connector snowmobile trails (see Exhibit D of Steve Signell's affidavit). At 9 feet in width this totals 39.93 acres; at 12 feet in width this totals 53.18 acres. If the DEC proposed to clearcut 40 or 53 acres in a large rectangle in one part of the Forest Preserve for some type of recreational activity this would never be allowed. Hence, we do not see how a clearcuts of either 40 or 53 acres that snakes through the Forest Preserve like a road can be allowed.

14. The decisions of the 1930 Association for the Protection of the Adirondacks v MacDonald case make the point, while striking down the state's plans to build a bobsleigh track on 4.5 acres of the Forest Preserve, that the Forest Preserve is not suitable for all forms of outdoor recreation. The remedy for questions of such use is to undertake a constitutional amendment. In the Appellate Division decision the following is stated: "If clearings of timber from lands owned by the State in the Forest Preserve are sanctioned for such a purpose, they are equally sanctioned for the construction of public automobile race tracks, toboggan slides, golf courses, baseball diamonds, tennis courts and airplane landing fields, all of which are out of harmony with forest lands in their wild state. There will be no limit to such encroachments that will crowd through the door of such precedent, if established. As we view it, the Legislature has no power to open that door. If the People desire to use their great park for such recreation a constitutional amendment is necessary." Note that the fair ball territory of Yankee Stadium is 2.6 acres and a tennis court is 78'x36' for doubles (15 tennis courts are contained in one square acre).

15. There have been six constitutional amendments to Article 14, Section 1 in recent decades since 1963 involving acreage far less than the 40-53 acres that either have been clearcut or will shortly be clearcut to build the Class II Community Connector trails. These amendments were all passed twice by the Legislature and approved by voters in public referendums. These include: 1) November 5, 1963: Saranac Lake Landfill, 10 acres; 2) November 2, 1965: Piseco Airport Runway Expansion, 28 acres; 3) November 8, 1983: Sagamore Institute Not-for-Profit, 10 acres; 4) November 5, 1991: Piseco Airport Runway Expansion, 50 acres; 5) November 7, 1995: Town of Keene Cemetery, 10 acres; 6) November 6, 2007: Raquette Lake Water Supply, 1 acre. Additionally, it's important to note that the State's three downhill ski areas on Forest Preserve lands were all authorized for construction by Constitutional amendments in 1941 (Whiteface) and 1947 (Gore, Belleayre). Clearcutting 40-53 acres throughout the Adirondack Forest Preserve should not be undertaken by administrative fiat, but should be subject to approval by the Legislature and approval by the voters of New York State. If trees could not be cut for the purposes above without a Constitutional amendment, then such must be the case today with a 36.5-mile, 40-53 acre motorized network of clearcut Class II Community Connector snowmobile trails. The history of the Adirondack Forest Preserve is that Constitutional protection in Article 14, Section 1 was deliberately bestowed upon the Forest Preserve to remove political decision making for major proposals that may favor one group or one type of use over another. The protection of the Forest Preserve was deemed to be so important, in essence a sacred covenant between the governing and the governed, that major questions about the use of the Forest Preserve are to be determined by the Legislature and voters and not by administrative action.

16. There is no meaningful comparison between a hiking trail and a Class II Community

Connector snowmobile trail. Tree cutting for a Class II Community Connector snowmobile trail runs upwards of 1,000 per mile as shown in the affidavit of Steve Signell, which is submitted simultaneously herewith. The Court of Appeals "MacDonald" decision states: "The framers of the Constitution, as before stated, intended to stop the willful destruction of trees upon the forest lands, and to preserve in the wild state now existing; they adopted a measure forbidding the cutting down of these trees to any substantial extent for any purpose." Surely, the DEC needs the flexibility to maintain public foot trails, and other facilities on the Forest Preserve. The DEC does limited tree cutting to build and maintain foot trails. For instance, the DEC opened a new 1.18 miles foot trail to the summit of Goodnow Mountain in 2015. Construction of this 1.18-mile foot trail removed 3 trees of 3" DBH and 61 trees of less than 1" DBH. This is not tree removal of a "substantial extent." By comparison, 1.18 miles along various stretches of the Newcomb to Minerva class II community connector snowmobile trail removed over 1,000 trees of all sizes per mile. (See Exhibit G)

17. The definition of "timber" is important to understand. It's important to understand the historic meaning for the United States in the late 19th century and it's important to understand what "timber" means today. In his affidavit herein, Dr. Philip Terrie has covered the meaning of "timber" in the late 19th century, which is germane to the 1894 Constitutional Convention. Below, I focus on the meaning of "timber" as understood today.

> Meriam Webster (online version) provides the following full definition of "timber":
>
> 1.□a--growing trees or their wood□b--used interjectionally to warn of a falling tree.
> 2.□wood suitable for building or for carpentry.
> 3.□material, stuff; *especially* : a person or type of person qualified for a particular position or status <managerial *timber*>.
> 4. a: large squared or dressed piece of wood ready for use or forming part of a structure□b *British* : lumber□c: a curving frame branching outward from the keel of a ship and bending upward in a vertical direction that is usually composed of several pieces

united : rib.

Dictonary.com (2016 online version) provides the following full definition of "timber":

1. the wood of growing trees suitable for structural uses.
2. growing trees themselves.
3. wooded land.
4. wood, especially when suitable or adapted for various building purposes.
5. a single piece of wood forming part of a structure or the like: *A timber fell from the roof.*
6. *Nautical.* (in a ship's frame) one of the curved pieces of wood that spring upward and outward from the keel; rib.
7. personal character or quality: *He's being talked up as presidential timber.*

As such, "timber" can mean wooded lands, trees that are being grown for commercial timber products, or actual largescale beams used for construction and other purposes. Clearly, there is no one modern definition for "timber" that exclusively means merchantable wood or trees of large diameter.

Peter Bauer

Sworn to before me this 31st
day of August, 2016.

NOTARY PUBLIC

CLAUDIA K. BRAYMER
NOTARY PUBLIC, State of New York
Reg. No. 02BR6238807
Qualified in Warren County
Commission Expires April 11, 2019